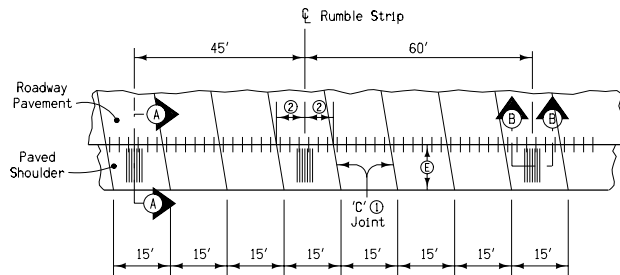


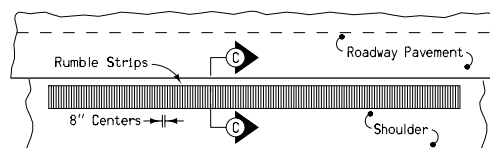
**TYPICAL PLAN**

P.C. Concrete Paved Shoulder Adjacent to Mainline with 20' Joint Spacing

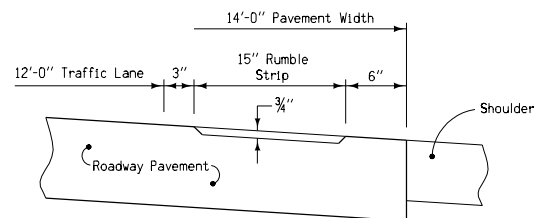


**TYPICAL PLAN**

P.C. Concrete Paved Shoulder Adjacent to Mainline with 15' Joint Spacing



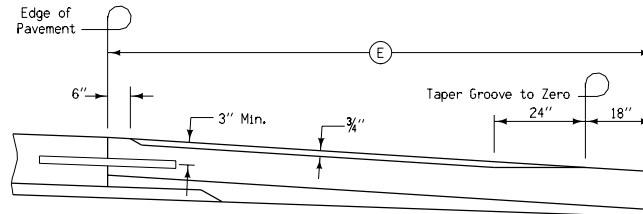
**TYPICAL PLAN  
HOT MIX ASPHALT SHOULDERS**



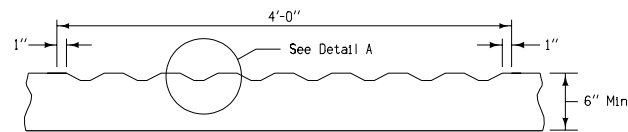
**TYPICAL SECTION**

Thru Pavement Edge 14'-0" Wide P.C.C. Pavement

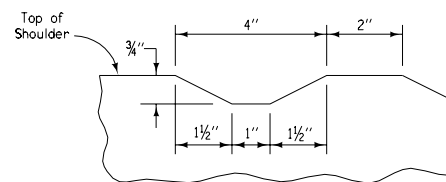
Use rumble strip and spacings shown in Typical Plans for P.C.C. Shoulders.



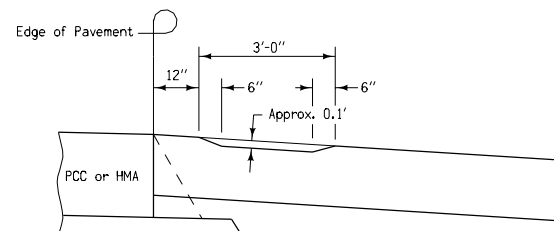
**SECTION A-A  
Rumble Strip  
P.C. CONCRETE SHOULDERS**



**SECTION B-B  
P.C. CONCRETE SHOULDERS**



**DETAIL A**



**SECTION C-C  
Rumble Strips  
HOT MIX ASPHALT SHOULDERS**

**GENERAL NOTES:**

The rumble strip shown on this plan is typical and is required on all 14' wide P.C.C. pavements and all paved shoulders. Alternate proposals will be considered for approval. Shoulders less than 6 feet wide will not be grooved.

**RUMBLE STRIPS.** On HMA shoulders, rumble strips shall be constructed by making indentations approximately 0.1 foot deep in the Hot Mix Asphalt surfacing.

The indentations shall be formed by rolling the Hot Mix Asphalt, while still hot, with a roller to which segments of 2-inch inside diameter pipe reinforced with proper size of reinforcing bar have been welded to the drum.

The pipe segments shall be 3 feet long, shall be cut longitudinally to provide a 40 percent segment and shall be beveled 6 inches at both ends. The pipe segments shall be welded to the roller drum at approximately 8-inch centers, with the rounded side of the pipe away from the drum.

The roller shall be equipped with a sighting device, enabling the operator to maintain alignment.

- ① "C" Joint in shoulder shall match the contraction joint in adjacent pavement.
- ② One-half joint spacing.

<b>STANDARD ROAD PLAN RH-41D</b>	
REVISION: Change ACC to HMA	REVISION NO. 6
APPROVED BY: <i>William J. Stein</i> DESIGN METHODS ENGINEER	REVISION DATE 10-02-01
<b>RUMBLE STRIPS</b>	